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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,329	12/02/2005	Takaomi Nakayama	4626.P0002US	8404
23474 7590 12/31/2009 FLYNN THIEL BOUTELL & TANIS, P.C. 2026 RAMBLING ROAD KALAMAZOO, MI 49008-1631				
EXAMINER				
YANG, JIE				
ART UNIT		PAPER NUMBER		
1793				
MAIL DATE		DELIVERY MODE		
12/31/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/537,329

**Applicant(s)**

NAKAYAMA ET AL.

**Examiner**

JIE YANG

**Art Unit**

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 3 and 5-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3 and 5-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/GS/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

Claims 1, 2, and 4 have been cancelled; claims 7-13, and 18 are amended;  
claims 3 and 5-18 remain for examination. Claim 18 is an independent claim.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 3, 5-7, 10,13-15, and 18 are rejected on the ground of nonstatutory obviousness type double patenting as being unpatentable over claims 1-18 of copending Application No. 10/480,841 and now updated as U.S. Patent 7,531,051 B2 (Thereafter US'051).

Claims 1-18 of US'051 is applied to claims 3, 5-7, 10, 13-15, and 18 for the same reason as stated in the previous office action marked 6/4/2009.

Regarding the newly amended features in the instant claims 7, 10, 13, and 18, claims 1-18 of US'051 teaches contact at least one metal with chemical solutions, which reads on the limitation of simultaneously contacting two or more metal materials with treating solution as recited in the instant claims. The other amended feature in the instant claim 18 does not change the scope of the claim.

Claims 8-9, 11-12, and 16-17 are rejected on the ground of nonstatutory obviousness type double patenting as being unpatentable over claims 1-18 of copending Application No. 10/480,841 and now updated as patent US 7,531,051 B2 (Thereafter US'051) in view of Bittner et al (WO 2002/024344, whose corresponding US patent application publication is US 2003/0185990 A1 (Thereafter PG'990) .

Claims 1-18 of US'051 in view of PG'990 is applied to claims 8-9, 11-12, and 16-17 for the same reason as stated in the previous office action marked 6/4/2009.

Regarding the newly amended features in the instant claims 8-9, and 11-12, claims 1-18 of US'051 teaches contact at least one metal with chemical solutions, which reads on the limitation

of simultaneously contacting two or more metal materials with treating solution as recited in the instant claims.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 5-7, 9, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frelin et al (US 4,313,769 B1, thereafter US'769).

US'769 is applied to claims 3, 5-7, 9, 16, and 18 for the same reason as stated in the previous office action marked on 6/4/2009.

Regarding the newly amended features in the instant claims 7, 9, and 18, US'769 teaches a process for coating aluminum or aluminum alloy by the acidic aqueous coating solution (Col.6, lines 42-54 of US'769) and the sanitary coating are dried simultaneously (Col.8, lines 67-68 of US'769), which reads on the limitation of simultaneously contacting two or more metal materials with treating solution as recited in the instant claims because the pure aluminum and aluminum alloy may be

reviewed as different metal materials. The other amended feature in the instant claim 18 does not change the scope of the claim.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over US'769 in view of Bittner et al (WO 2002/024344, whose corresponding US patent application publication is US 2003/0185990 A1 (Hereinafter PG'990)).

US'769 in view of PG'990 is applied to claim 8 for the same reason as stated in the previous office action marked on 6/4/2009.

Regarding the newly amended features in the instant claim 8, US'769 teaches a process for coating aluminum or aluminum alloy by the acidic aqueous coating solution (Col.6, lines 42-54 of US'769) and the sanitary coating are dried simultaneously (Col.8, lines 67-68 of US'769), which reads on the limitation of simultaneously contacting two or more metal materials with treating solution as recited in the instant claims because the pure aluminum and aluminum alloy may be reviewed as different metal materials.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over US'769 in view of Bartik-Himmeler et al (US 6,627,006 B1, hereinafter US'006).

US'769 in view of US'006 is applied to claim 13 for the same reason as stated in the previous office action marked on 6/4/2009.

Regarding the newly amended features in the instant claim 13, US'769 teaches a process for coating aluminum or aluminum alloy by the acidic aqueous coating solution (Col.6, lines 42-54 of US'769) and the sanitary coating are dried simultaneously (Col.8, lines 67-68 of US'769), which reads on the limitation of simultaneously contacting two or more metal materials with treating solution as recited in the instant claims because the pure aluminum and aluminum alloy may be reviewed as different metal materials.

Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over US'769 in view of Reghi (US 4,338,140, thereafter US'140).

US'769 in view of US'140 is applied to claims 14-15 for the same reason as stated in the previous office action marked on 6/4/2009.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over US'769 in view of Tomlinson (US 5,380,374, thereafter US'374).

US'769 in view of US'374 is applied to claim 17 for the same reason as stated in the previous office action marked on 6/4/2009.

Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US'769 in view of JP 04-107290 (hereafter JP'290).

US'769 in view of JP'290 is applied to claims 10 and 12 for the same reason as stated in the previous office action marked on 6/4/2009.

Regarding the newly amended features in the instant claims 10 and 12, US'769 teaches a process for coating aluminum or aluminum alloy by the acidic aqueous coating solution (Col.6, lines 42-54 of US'769) and the sanitary coating are dried simultaneously (Col.8, lines 67-68 of US'769), which reads on the limitation of simultaneously contacting two or more metal materials with treating solution as recited in the instant claims because the pure aluminum and aluminum alloy may be reviewed as different metal materials.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over US'769 in view of JP 04-107290 (hereafter JP'290) and further in view of PG'990.



US'769 in view of JP'290 and PG'990 is applied to claim 11 for the same reason as stated in the previous office action marked on 6/4/2009.

Regarding the newly amended features in the instant claim 11, US'769 teaches a process for coating aluminum or aluminum alloy by the acidic aqueous coating solution (Col.6, lines 42-54 of US'769) and the sanitary coating are dried simultaneously (Col.8, lines 67-68 of US'769), which reads on the limitation of simultaneously contacting two or more metal materials with treating solution as recited in the instant claims because the pure aluminum and aluminum alloy may be reviewed as different metal materials.

### ***Response to Arguments***

Applicant's arguments filed on 9/8/2009 for claims 3, 5-18 have been fully considered but they are not persuasive. Regarding the arguments related to the amended limitations, the Examiner's position is stated as above.

In the remark, the Applicant argues:

1) Regarding the nonstatutory obviousness type double patenting rejection, claims 1-18 of US'051 requires the presence of a third component containing at least one metal selected from the group consisting of silver, copper, and cobalt, but the present invention exclude these elements.

2) US'769 does not teach the specified oxygen acid or salt thereof required in the present claimed invention and the concentration range taught by US'769 is much broader than that of the present invention which requires from 0.1 to 100ppm of free fluorine ion.

In response

Regarding the argument 1), the Examiner notes the transitional language "consisting essentially of" in the instant claim 18. The transitional language "consisting essentially of" will be constructed as equivalent to "comprising." See, e.g., PPG, 156 F.3d at 1355, 48 USPQ2d at 1355. If an applicant contends that additional steps or materials in the prior art are excluded by the recitation of "consisting essentially of," applicant has the burden of showing that the introduction of additional steps or components would materially change the characteristics of applicant's invention. In re De Lajarte, 337 F.2d 870, 143 USPQ 256 (CCPA 1964). See MPEP 2111.03. In the instant case, the applicant has not shown that the introduction of the additional elements would materially change the characteristics of applicant's invention.

Regarding the argument 2), as pointed out in the previous office action marked 6/4/2009, US'769 teaches a process for coating aluminum or aluminum alloy with a conversion coating solution comprising Zr, free fluoride, Ca, nitric acid, boric acid, water soluble and water-dispersible polymer compounds, and nonionic surfactant, either read on or overlap the claimed coating component concentration. Therefore, a *prima-facie* case of obviousness exists. See MPEP 2144.05. The Examiner notes that the

Applicants have not provide any persuasive evidence to show the criticality of the claimed range of 0.1 to 100ppm of free fluorine ion.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jie Yang whose telephone number is 571-2701884. The examiner can normally be reached on IFP.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-2721244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JY

/Roy King/  
Supervisory Patent Examiner, Art Unit 1793